

=====

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).

Reviewer: markspencer

Timestamp: [year=2008; month=4; day=17; hr=15; min=44; sec=9; ms=577;]

=====

Application No: 10561877

Version No: 1.0

Input Set:

Output Set:

Started: 2008-04-02 13:30:52.963

Finished: 2008-04-02 13:30:54.150

Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 187 ms

Total Warnings: 10

Total Errors: 0

No. of SeqIDs Defined: 14

Actual SeqID Count: 14

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)

SEQUENCE LISTING

<110> GOGGINS, MICHAEL G.
NORIHIRO, SATO

<120> METHYLATED GENE BIOMARKERS FOR DETECTING CANCER

<130> (71699) 61506

<140> 10561877

<141> 2008-04-02

<150> PCT/US04/020535

<151> 2004-06-24

<150> 60/482,146

<151> 2003-06-24

<160> 14

<170> PatentIn Ver. 3.3

<210> 1

<211> 2313

<212> DNA

<213> Homo sapiens

<400> 1

```

gaattccttg tacttttttt cccttctcag ttctgcactt aactcgtcta aaaaaattaa 60
aaaagaattt aagaaaccac aaagctaagc tgggtgcggt ggctcacgcc tgtaatccta 120
gcactttggg aagccaaggc attcggattg cccaagctca ggagttcgag accagcctgg 180
gcaacatggt gaaaccccat ttctactaaa aatacaataa attagctggg tgttgtggca 240
tgtgcgcctg taatcccagc tactctggag gctgaggcgc gataattgct tgaaccggg 300
aggcagaggt tgcagtgagc cgaaatcata ccactgcact ccagcctggg cgacagagtg 360
agtgcagctc tgtctcaaaa caaaacaaaa caaacaaaaa aaaaaaccgg aaaccaacaa 420
aactttttga ggaacaaagg gaaccaggta ttttattaat tctcatacct ccagagtgtt 480
aggcacaaaa taaacattca accaagacct gttgcactga gcagttcata tataacagga 540
gtgacccaag ttgaaacgta gaatcagccc tctcatacca ctttttgcca ggtgatcata 600
ggcaagttac ttagcatcta tgtttcctta ttattaaaat ggtcataatt acaatgccta 660
agataagggg gttgctgtga agattattaa atcctcagta aactttggtt attgttactc 720
ctatgattat catcaatatc atcaattacc ttatctgttc aatactggtg gcacaggtcc 780
accagctaga tgtctaatec cttatgtgtc tattagtggg acaagtggag tttgagtggg 840
atTTTTTTTT tTTTTTTTaa gaccagttcc aaatcatcaa ggatgatacc actagtagca 900
gcttgtcttg tctgtacagt ggtaagtcct ggcttgcct ttgtggcaa tacaaccccc 960
ttgaattgct tggcccttct cagcattgcc taatattagg gaggactcct gtaaagctca 1020
ctgggttagaa gatcaagaca cttgggcctg gttctgcccc tggggggccat tgggtaattc 1080
cttssagtct ccaggcctca cttgccctct gaacaagaaa gaggcctgtt ctgggtcatcc 1140
ctccagcctg tccagcctg gcaactctgtg agtcggttta ggcagcagcc cgggaacaga 1200
tgaggcaggc aggggttgga cgtttggtca ggacagccca ccgcaaaaag aggaggaaag 1260
aaatgaaaga cagagacagc tttggctatg ggagaaggag gaggccgggg gaaggaggag 1320
acaggaggag gagggaccac ggggtggagg ggagatagac ccagcccaga gctctgagtg 1380
gtttcctgtt gcctgtctct aaaccctcc acattcccgc ggtccttcag actgcccga 1440
gagcgcgctc tgccctgccg ctgectgcct gccactgagg tatgtgtgac ccccgcccag 1500
cctttccctt ctatagttgc accaaccctg acaccctcgt tcacgccgtc agctcgtgtg 1560
caaggaggag aagctctgct gaggatgcgc ctctcctccc ggtccatca cggctcccct 1620

```

taagagcatg gccctcggtc ctgtctgcct gttgcttttc agaaggtgga ctccactgtgt	1680
aactttgtct tcccttacag gtttacagga aaataatctc actatgttct tcgggggagc	1740
attttctcac tctctgtttt tctctgtgtc tgtctctggg ttcagaggct gcctgcctgt	1800
cctctttgct ccctttgcaa atgtggcagc ctccctcttt cctgggaatc tgatcccatc	1860
acagctgcca cagggacctg gccagcaacc ggagtctgtc ctccagatct cggtcagggg	1920
ttctgttttc caaaaaggga ctttgacagaa caatcagttg atctctgaaa gggaaagggg	1980
gaggcttcac cattaatcca cacctctggg aagcttctgt tttcctctaa ttctcctcac	2040
tcccaaacac caccttcctg ccccccata cacaatttc agcaccattc tgctgaaat	2100
ggcaccatca caacctcagt cttgggttag gtgttggtcc tgtctgagt tccttgggat	2160
ggtaaacaca ggcagtagcc cttagtttat ctagatctga aaaccagac atcagatata	2220
gtcaaccaag acatgggtgt aatgggaggt ggagtgtgct gggggagata ttctcagaag	2280
ggggaaaggg ggaagggaag agggagagaa ttc	2313

<210> 2

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 2

atttagttta gagtgttgag tgg	23
---------------------------	----

<210> 3

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 3

acaaaacttc cctcccttac	20
-----------------------	----

<210> 4

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic primer

<400> 4

tttttttagat tgtttggaga gtg	23
----------------------------	----

<210> 5

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
primer

<400> 5

aactaacaac ataaacaaaa atatc

25

<210> 6

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
primer

<400> 6

gagagcgcggt tttgtttgtc

20

<210> 7

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
primer

<400> 7

aacgacgtaa acgaaaatat cg

22

<210> 8

<211> 1020

<212> DNA

<213> Homo sapiens

<400> 8

tttssagttt ttaggtttta tttgtttttt gaataagaaa gaggtttgtt ttggttattt 60
ttttagtttg tttagttttg gtattttgtg agtcggttta ggtagtagtt tcggaataga 120
tgaggtaggt aggggttgga cgtttgggta ggatagttta tcgtaaaaag aggaggaaag 180
aatgaaaaga tagagatagt tttggttatg ggagaaggag gaggtcgggg gaaggaggag 240
ataggaggag gagggattac ggggtggagg ggagatagat ttagtttaga gttttgagtg 300
gttttttgtt gtttggtttt aaattttttt atattttcgc ggttttttag attgttcgga 360
gagcgcggtt tgtttgtcgt ttgtttgttt gttattgagg tatgtgtgat ttctgtttag 420
tttttttttt ttatagttgt attaatttcg atattttcgt ttacgtcgtt agttcgtgtg 480
taaggaggag aagttttgtt gaggatgcgt tttttttttc ggttttatta cggttttttt 540
taagagtatg gttttcgggt ttgtttgttt gttgtttttt agaagtgga tttattgtgt 600
aattttgttt ttttttatag gtttatagga aaataatttt attatgtttt tcgggggagt 660
atttttttat tttttgtttt tttttgtgtt tgtttttggg ttttagagggt gtttggtttg 720
tttttttgtt tttttgttaa atgtggtagt tttttttttt tttgggaatt tgattttatt 780
atagttgtta tagggatttg gtttagtaatc ggagtttgtt ttttagattt cggttagggg 840
ttttgttttt taaaaaggga tttttagtaa taattagttg atttttgaaa gggaaagggg 900
gaggttttat tattaattta tatttttggg aagtttttgt ttttttttaa ttttttttat 960

ttttaaatat tatttttcgt ttttttaata tataaatattt agtattattt tgtttgaaat 1020

<210> 9

<211> 360

<212> DNA

<213> Homo sapiens

<400> 9

ataggaggag gagggattat ggggtggagg ggagatagat ttagtttaga gttttgagtg 60
gttttttgtt gtttgttttt aaattttttt atatttttgt ggttttttag attgtttgga 120
gagtgtgttt tgtttgttgt ttgtttgttt gttattgagg tatgtgtgat ttttgtttag 180
tttttttttt ttatagttgt attaatattg atatttttgt ttatgttgtt agtttggtgtg 240
taaggaggagg aagttttgtt gaggatgtgt tttttttttt ggttttatta tggttttttt 300
taagagtatg gtttttggtt ttgtttgttt gttgtttttt agaagggtgga tttattgtgt 360

<210> 10

<211> 360

<212> DNA

<213> Homo sapiens

<400> 10

ataggaggag gagggattac ggggtggagg ggagatagat ttagtttaga gttttgagtg 60
gttttttgtt gtttgttttt aaattttttt atattttcgc ggttttttag attgttcgga 120
gagcgcgttt tgtttgctgt ttgtttgttt gttattgagg tatgtgtgat tttcgttttag 180
tttttttttt ttatagttgt attaatattc atattttcgt ttacgtcgtt agttcgtgtg 240
taaggaggagg aagttttgtt gaggatgcgt tttttttttt ggttttatta cggttttttt 300
taagagtatg gttttcgtt ttgtttgttt gttgtttttt agaagggtgga tttattgtgt 360

<210> 11

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
primer

<400> 11

aagatccatg agaatgagaa g 21

<210> 12

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
primer

<400> 12

aaaagcgggt ggtgcaatg 19

<210> 13
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 13
atgtgaagag 10

<210> 14
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 14
tttttttttt tttttttttt tttt 24